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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/867,973

05/30/2001

Ronald Paul Rohrbach

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8302

7590

09/08/2005

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EXAMINER

CINTINS, IVARS C

ART UNIT

PAPER NUMBER

1724

DATE MAILED: 09/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

T.D

<b>Office Action Summary</b>	<b>Application No.</b> 09/867,973	<b>Applicant(s)</b> ROHRBACH ET AL.	
	<b>Examiner</b> Ivars C. Cintins	<b>Art Unit</b> 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 June 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 and 13-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 13-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 5-10, 13-15, 17 and 18 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Brownawell et al. (U.S. Patent No. 5,069,799; hereinafter "Brownawell '799"). As pointed out in the previous Office action, Brownawell '799 discloses an oil filter comprising a hollow housing having an inlet and an outlet, a mechanically active filter member (i.e. "inactive filter media" 12) disposed inside the housing, and a chemically active filter member (i.e. 14) disposed inside this housing. This reference further discloses an embodiment (see Fig. 2) having a supplemental cartridge with a chemically active filter member (i.e. 30) disposed therein. The chemically active filter member includes a plurality of particles (see col. 2, line 6) containing a beneficial additive such as a basic salt of the type recited (see col. 2, lines 12-17). Accordingly, this reference discloses the claimed invention with the exception of the diameter of the particles in the chemically active filter member (claims 1, 2, 5-10, 13-15, 17), and the percentage of additive in these particles (claim 18). However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ particles having the recited diameter in the reference system, in order to facilitate handling of the treatment material in this reference system. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the recited amount of beneficial additive in the reference particles, in order to ensure that a sufficient amount of additive is present in these particles to adequately rejuvenate the oil undergoing treatment.

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Claim 3 is again rejected under 35 U.S.C. 103(a) as being unpatentable over Brownawell '799 as applied above, and further in view of DeJovine (U.S. Patent No. 4,144,166). As pointed out in the previous Office action, Brownawell '799 as modified above discloses the claimed invention with the exception of the recited polymeric binder. DeJovine discloses a similar oil filter, and teaches supporting an oil additive material such as calcium carbonate or calcium hydroxide (see col. 11, lines 57-58) with a polymeric material of the type recited (see col. 3, line 20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the polyolefin of DeJovine as the "polymer matrix" of Brownawell '799 (see col. 2, line 2), since this polyolefin is capable of supporting the calcium carbonate or calcium hydroxide of this primary reference (see col. 2, lines 12-13) in the required manner.

Claim 4 is again rejected under 35 U.S.C. 103(a) as being unpatentable over Brownawell '799 as applied above, and further in view of Bilski et al. (U.S. Patent No. 5,725,031). As pointed out in the previous Office action, Brownawell '799 as modified above discloses the claimed invention with the exception of the recited location of the chemically active filter element with respect to the mechanically active filter element. Bilski et al. discloses a similar oil filter containing both a mechanically active filter element and means for adding a chemical to oil undergoing treatment, and further discloses (see Fig. 1) locating the chemical adding element radially and coaxially inside the mechanically active filter element. It would have been obvious to one of ordinary skill in the art at the time the invention was made to locate the chemically active filter element (i.e. 14) of Brownawell '799 inside the mechanically active filter element (i.e. 12), as suggested by Bilski et al, in order to produce a more compact filtration and treatment device.

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Claim 16 is again rejected under 35 U.S.C. 103(a) as being unpatentable over Brownawell '799 as applied above, and further in view of Robers et al. (U.S. Patent No. 5,544,699). As pointed out in the previous Office action, Brownawell '799 as modified above discloses the claimed invention with the exception of the recited auxiliary inlet and outlet tubes. Robers et al. discloses an oil filter having auxiliary inlet and outlet tubes (42 and 44), in order to cool the oil in the system. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of the modified primary reference with the cooling arrangement of Robers et al., in order to obtain the advantages disclosed by this secondary reference for the system of the modified primary reference.

Applicant's arguments filed June 2, 2005 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant argues that "Brownawell '799 is silent as to Applicant's claimed filter using particles of a particular average diameter." It is pointed out, however, that the particles in the chemically active filter member of this reference device must inherently have some average diameter. One of ordinary skill in the oil treatment art would readily recognize that particles having an average diameter significantly below 0.1 millimeters could cause handling problems in the reference device, since powders are more difficult to handle than are larger granules. One of ordinary skill in the oil treatment art would also readily recognize that particles having an average diameter significantly above 6 millimeters could cause problems in the reference device, since the interstitial space between these particles could be too great to produce adequate contact between the chemically active media and the oil undergoing treatment. Accordingly, this skilled artisan would have been motivated to select

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particles having an average diameter within the recited range, in order to avoid the above noted problems.

Applicant also argues that “Brownawell is silent as to any necessary concentrations or amounts of such chemically active filter media.” Again, this argument has been noted and carefully considered, but is not deemed to be persuasive of patentability. It is pointed out that the particles in the chemically active filter member of this reference device must inherently have some percentage of beneficial additive. Since, one of ordinary skill in the oil treatment art would readily recognize that particles having a greater concentration of beneficial additive would be more efficient in treating oil than would particles having a lesser concentration of this additive, this skilled artisan would have been motivated to employ particles having the recited percentage of beneficial additive in the reference device.

Applicant also questions the combination of Brownawell with DeJovine pointing out that Brownawell “merely indicates that the chemically active filter media may be supported on substrates such as alumina, activated clay, cellulose, cement binder, silica-alumina, activated carbon and the like.” Again, this argument has been noted and carefully considered, but is not deemed to be persuasive of patentability. It is pointed out that in addition to the above noted materials, Brownawell also teaches that a polymer matrix can be employed as the substrate material (see col. 2, line 4). Accordingly, one of ordinary skill in the oil treatment art would have been motivated to employ the polyolefin of DeJovine as the “polymer matrix” of the primary reference, since this polyolefin is capable of supporting the calcium carbonate or calcium hydroxide of this primary reference in the required manner.

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Applicant also argues that it would not have been obvious to combine the teachings of Bilski and Brownawell because "Bilski teaches that the small particle size is crucial to having the PTFE completely displaced by the incoming oil." Once again, this argument has been noted and carefully considered, but is not deemed to be persuasive of patentability. It is pointed out that Bilski is relied upon only for the teaching of locating the chemical adding element radially and coaxially inside a mechanically active filter element, not for any particle size; and given this teaching, one of ordinary skill in the oil treatment art would have been motivated to locate the chemically active filter element of Brownawell inside the mechanically active filter element of this reference device, in the manner proposed above.

Applicant also argues that it would not have been obvious to combine the teachings of Robers and Brownawell because "Robers does not disclose an oil filter." This argument has been noted and carefully considered, but is not deemed to be well founded. Robers clearly discloses an oil filter (i.e. 14; see col. 4, line 8) having auxiliary inlet and outlet tubes (42 and 44), in order to cool the oil in the system; and given this teaching, one of ordinary skill in the oil treatment art would have been motivated to provide the oil filter of the modified primary reference with the cooling arrangement of Robers, in the manner proposed above.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period


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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is 571-272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at 571-272-1166.

The centralized facsimile number for the USPTO is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**Ivars C. Cintins**  
**Primary Examiner**  
**Art Unit 1724**

I. Cintins  
September 5, 2005